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the indictment, in order to constitute a sufficient charge of crime to warrant interstate extradition, need show no more than that the accused was substantially charged with crime. This indictment meets and surpasses that standard, and is enough. If more were required it would impose upon courts, in the trial of writs of habeas corpus, the duty of a critical examination of the laws of States with whose jurisprudence and criminal procedure they can have only a general acquaintance. Such a duty would be an intolerable burden, certain to lead to errors in decision, irritable to the just pride of the States and fruitful of miscarriages of justice. The duty ought not to be assumed unless it is plainly required by the Constitution, and, in our opinion, there is nothing in the letter or the spirit of that instrument which requires or permits its performance.

Judgment affirmed.

CONTINENTAL PAPER BAG COMPANY v. EASTERN PAPER BAG COMPANY.

CERTIORARI TO THE CIRCUIT COURT OF APPEALS FOR THE FIRST CIRCUIT.

No. 202. Argued April 15, 1908.—Decided June 1, 1908.

The previous decisions of this court are not to be construed as holding that only pioneer patents are entitled to invoke the doctrine of equivalents, but that the range of equivalents depends upon the degree of invention; and infringement of a patent not primary is therefore not averted merely because defendant's machine may be differentiated.

Under § 4888, Rev. Stat., the claims measure the invention, and while the inventor must describe the best mode of applying the principle of his invention the description does not necessarily measure the invention.

Where both of the lower courts find that complainant did with his machine what had never been done before and that defendant's machine infringed, this court will not disturb those findings unless they appear to be clearly wrong.

Patents are property and entitled to the same rights and sanctions as other property.

An inventor receives from a patent the right to exclude others from its use for the time prescribed in the statute, and this right is not dependent on his using the device or affected by his non-use thereof, and, except in a case where the public interest is involved, the remedy of injunction to prevent infringement of his patent will not be denied merely on the ground of non-user of the invention.

150 Fed. Rep. 741, affirmed.

This is a bill in equity to restrain the infringement of letters patent No. 558,969, issued to William Liddell for an improvement in paper bag machines for making what are designated in the trade as self-opening square bags. The claims in suit do not include mechanism for making a complete bag, but only mechanism for distending one end of a tucked or bellows folded paper tube made by other mechanism, and folding it down into a form known in the art as the "diamond fold." This fold is flattened and pasted by other mechanism and forms a square bottom to the bag.

The bill is in the usual form and alleges infringement of the claims by the Continental Paper Bag Company, hereafter called the Continental Company, and prays for an accounting and an injunction.

The answer interposed the defense of non-jurisdiction of a court of equity, non-infringement of the Liddell patent by defendant (Continental Company) and want of invention.

The allegation of the answer as to the jurisdiction of the court is as follows:

"The defendant says, on information, advice and belief, that a court of equity has no jurisdiction to grant any prayer of the bill of complaint, even if the said Liddell patent, No. 558,969, were valid, and even if the defendant's paper bag machines were to be held to infringe that patent, because the said patent, No. 558,969, is a mere paper proposition which the complainant has never put into effect or use, and because it is contrary to equity to suppress a useful and established business, like that which the defendant is prosecuting with its paper bag machines, at the request of a complainant which simply owns one paper bag machine patent that has never been employed by

Argument for Petitioner.

that complainant in any way in any paper bag machinery, and because the complainant in this case has a plain, adequate and complete remedy at law for any infringement which may have been done upon Liddell letters patent, No. 558,969."

The Circuit Court adjudged the patent valid as to the first, second and seventh claims thereof; that the Eastern Paper Bag Company was the owner of the letters patent; that Liddell was the original and first inventor of the improvements described in the claims, and that the Continental Company had infringed the same. It was also adjudged that the Eastern Company recover of the Continental Company the profit the latter had made or received by the infringement. An account was ordered and a perpetual injunction decreed. 142 Fed. Rep. 479. The decree was affirmed by the Circuit Court of Appeals. 150 Fed. Rep. 741. This certiorari was then granted.

Mr. Albert H. Walker for petitioner:

The owner of any patent who, beginning with the granting of that patent, long and always and unreasonably holds in non-use the invention covered thereby, is not equitably entitled to a writ of injunction to enable him to prevent others from introducing that invention into use in the art to which it belongs, and thus causing it to promote the progress of that art.

To permit the owner of a patent held in non-use to invoke the aid of courts of equity to enjoin the use by others of an invention which he refuses to use himself, would defeat the very object of the patent laws and of the constitutional provision to which they owe their existence, and such a course, had it been pursued in the past, would have blocked the road along which the great historic inventions of the nineteenth century have proceeded to their present state of perfection.

Injunctions should not be issued in behalf of patents held in non-use for the additional reason that the alleged infringers are often acting under independently made inventions of their own, which were so nearly contemporaneous in time of origin with the inventions of the patents in suit that it is difficult and sometimes impossible to ascertain which of them is entitled to priority in the art to which they belong, and such was the fact in the case at bar.

Under the circumstances of this case, it was incumbent upon the owner of the Liddell patent either to put the Liddell invention into regular manufacturing use, or to license others to do so for a reasonable royalty, and having always omitted so to do either from April, 1896, until this action was brought more than five years later, and indeed until now, nearly seven years later yet, the owner of that patent is ethically limited to actions at law for its alleged infringement, and is not entitled, "according to the course and principles of courts of equity," to an injunction with which to stop the numerous and costly machines of the defendant from operating.

An injunction should not be issued in favor of a non-used patent, because the patent laws of nearly every foreign country forbid such assistance in favor of any patent held in non-use, and to grant such injunctions here would be to give to foreign inventors advantages in our own country which are denied to our citizens abroad.

The cases cited in the Circuit Court of Appeals, opinion on the question of law above discussed, do not really support the conclusion reached. Bement v. National Harrow Co., 186 U. S. 70; Fuller v. Berger, 120 Fed. Rep. 274; Heaton Peninsular Button Fastener Co. v. Eureka Specialty Co., 77 Fed. Rep. 288; Crown Cork & Seal Co. v. Aluminum Stopper Co., 108 Fed. Rep. 845; Broadnax v. Central Stockyard Co., 4 Fed. Rep. 214; Consolidated Roller Mill Co. v. Coombs, 39 Fed. Rep. 803; Campbell Printing Press Co. v. Manhattan Ry. Co., 49 Fed. Rep. 930, discussed and distinguished.

The following cases sustain the contention of petitioner herein that the aid of equity should not be granted in cases of this character. Isaacs v. Cooper, 4 Wash. C. C. 259; Ogle v. Ege, 4 Wash. C. C. 584; Mott v. Bennett, 2 Fisher, 642; Sullivan v. Redfield, 1 Paine, 441; Magic Ruffle Co. v. Douglas, 2

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Fisher, 333; Hoe v. Knap, 27 Fed. Rep. 212; Germain v. Wilgus, 67 Fed. Rep. 600; Campbell Printing Press Co. v. Duplex Printing Press Co., 86 Fed. Rep. 331; 1 Robinson on Patents, § 43, pp. 65, 66; Curtis on Patents, 1st ed. and 2d ed., § 320; and 3d ed. and 4th ed., § 406.

Upon the question of infringement it is contended that:

First. The Liddell patent is the twentieth, in the particular department of the general art to which it belongs; nineteen prior patents showed and described nineteen combinations of machinery, for doing exactly the same work as that which the Liddell patent shows a twentieth combination of machinery for doing.

Second. That combination of machinery which is specified in claims 1, 2 and 7 of the Liddell patent, is both analytically and synthetically very different from that combination of machinery, in the defendant's machines, which was held by the Circuit Court of Appeals for the First Circuit, to infringe those claims.

Third. That decision cannot be affirmed by the Supreme Court, without reversing all of those twelve prior decisions in which, during fifty years, the Supreme Court has established, enforced and formulated, as one of the patent laws of the United States, the rule that: "Where the patent does not embody a primary invention, but only an improvement on the prior art, and the defendant's machines can be differentiated, the charge of infringement is not sustained." McCormick v. Talcott. 20 How. 405 (1857); Railway Co. v. Sayles, 97 U. S. 556 (1878); Morley Machine Co. v. Lancaster, 129 U. S. 273 (1889); Pope Mfg. Co. v. Gormully Mfg. Co., 144 U. S. 242 (1892); Sessions v. Romadka, 145 U. S. 45 (1892); Knapp v. Morss, 150 U. S. 230 (1893); Miller v. Eagle Co., 151 U. S. 204 (1894); Duff v. Pump Co., 107 U. S. 639 (1882): Boyd v. Janesville Hay Tool Co., 158 U.S. 267 (1895); Dashiell v. Grosvenor, 162 U.S. 432 (1896); Kokomo Fence Machine Co. v. Kitselman, 189 U. S. 8 (1903); Cimiotti Unhairing Co. v. American Fur Refining Co., 198 U.S. 399 (1905).

Mr. Samuel R. Betts and Mr. Francis T. Chambers, with whom Mr. James J. Cosgrove was on the brief, for respondent:

Under the principles of law and equity which must govern the right to injunctions restraining the infringement of patents for inventions, the court committed no error in entertaining jurisdiction, even though there had been no commercial use of the invention.

After the inventor has made a full and complete disclosure of his invention, he is under no moral or legal obligation to any portion of the public. He is not required by the patent statute to directly or indirectly put it into commercial use, nor is he obliged to permit others to do so, directly or indirectly. except upon his own lawful terms. Having disclosed his invention, he is legally and equitably entitled to all the benefits of the laws, whether administered by a court of law or equity. He has an absolute legal and equitable right to avail himself of all means which the law provides and the machinery of its courts, for preventing others from taking advantage of his invention before his patent expires. The public, acting through the Government, induced him to disclose to it his invention. and has granted him these rights and has agreed and promised to enforce and protect them. The inventor, having fully complied with all of his obligations, the Government cannot indirectly, by withholding an injunction, permit any portion of the public to take advantage of his invention (unless there is a special equity in favor of some portion of the public against the inventor), and thus force him to make use thereof or permit infringers to do so, perhaps on their terms, without failing in its duty and violating its moral and legal obligation as well as its solemn statutory promise, by which it persuaded the inventor to part with his secret property and to disclose the invention, so that the public might obtain immediate knowledge of it and share in and have the full benefit of it after the expiration of the patent.

Therefore, considerations of any alleged immediate public benefit resulting from the inventor putting the invention into

Argument for Respondent.

commercial use, should not induce the courts to deprive the inventor of any of his rights, either directly or indirectly, by withholding its most effective process for the preservation of these rights, viz: that of injunction. Grant v. Raymond. 6 Peters, 218, 243 (opinion by Chief Justice Marshall); Wilson v. Rousseau, 4 How. 646-674; Bloomer v. McQuewan, 14 How. 539; Seymour v. Osborne, 11 Wall. 516, 533; Cammeyer v. Newton, 94 U. S. 226; Patterson v. Kentucky, 97 U. S. 501; Densmore v. Scofield, 102 U.S. 375; United States v. Bell Telephone Co., 167 U. S. 249; Connolly v. Union Sewer Co., 184 U. S. 540, 546; Bement v. National Harrow Co., 186 U. S. 70, 90; Edison v. Mt. Morris Co., 57 Fed. Rep. 542, 644 (2d Cir.); Heaton Peninsular Co. v. Eureka Co., 77 Fed. Rep. 294 (6th Cir.); Crown Cork & Seal Co. v. Aluminum Stopper Co., 108 Fed. Rep. 845, 868 (4th Cir.); Fuller v. Berger, 120 Fed. Rep. 274. 277 (7th Cir.); Lamson Consolidated Service Co. v. Hillman, 123 Fed. Rep. 416, 422 (7th Cir.); Victor Talking Mach. Co. v. Fair, 123 Fed. Rep. 425 (7th Cir.); U. S. Seeded Raisin Co. v. Griffin, 126 Fed. Rep. 364, 368 (9th Cir.); Rupp v. Elliott, 131 Fed. Rep. 730 (6th Cir.); Munroe v. Railway Appliance Co., 145 Fed. Rep. 646, 648 (7th Cir.); Filter Co. v. Jackson, 140 Fed. Rep. 340, 343 (8th Cir.); U. S. Fastener Co. v. Bradley, 149 Fed. Rep. 222 (2d Cir.); Rubber Tire Co. v. Milwaukee, 154 Fed. Rep. 358, 361 (7th Cir.); Indiana Mig. Co. v. J. I. Case Co., 154 Fed. Rep. 365 (7th Cir.); Carr v. Rice, 1 Fish. 198, 200 (N. Y.); Wintermute v. Redington, 1 Fish. 243 (Ohio); Ransom v. Mayor, 1 Fish. 255 (N. Y.); Pitts v. Wemple, 2 Fish. 15 (Ill.); Whitney v. Emmett, 1 Bald. 304; Broadnax v. Central Stock Yard, 4 Fed. Rep. 214, 216 (N. J.): In re Brosnahan, 18 Fed. Rep. 62 (Justice Miller) (Mo.); Consolidated v. Coombs, 39 Fed. Rep. 803 (Mich.); Wirt v. Hicks, 46 Fed. Rep. 71 (N. Y.); Campbell v. Manhattan Railway, 49 Fed. Rep. 930 (N. Y.); Edison v. Mt. Morris, 57 Fed. Rep. 642, 644 (N. Y.); Masseth v. Reiber. 59 Fed. Rep. 612 (Pa.); Bonsak v. Smith, 70 Fed. Rep. 383 (N. C.); Columbia v. Freeman, 71 Fed. Rep. 302, 306 (Mo.); Wyckoff v.

Wagner, 88 Fed. Rep. 515 (N. Y.); White v. Peerless, 111 Fed. Rep. 190 (Pa.); Brodrick v. Mayhew, 131 Fed. Rep. 92 (Wis.); National Co. v. Daab, 135 Fed. Rep. 891, 895 (N. J.); Hoe v. Miehle, 141 Fed. Rep. 115 (N. Y.); Hartmann v. Park & Son, 145 Fed. Rep. 358 (Ky.).

Withholding the injunction restraining the petitioner's infringement of the valid Liddell patent, on the ground of non-use of the invention thereof, would be a violation of respondent's constitutional and statutory rights, and contrary to the "course and principles of equity."

The court below was not in error in holding that the invention of claims 1, 2 and 7 of the Liddell patent was of sufficient breadth to cover the defendant's machine.

The courts below having found as matters of fact that the petitioner's evidence was insufficient to overcome the presumption of priority of invention of the patent in suit, and that the patent was a broad one and that the evidence disclosed no material difference in structure and mode of operation and results between the petitioner's machine and the machine of the patent, the decisions on these matters of fact will not be reëxamined by this court. Bement v. National Harrow Co., 186 U. S. 70.

No one of the claims in suit is limited to the use of the specific form of mechanism illustrated in the drawings for giving the described movements to the characteristic parts of the combination. It is also evident from a consideration of the detailed mechanisms pointed out in the drawing, as illustrative, or efficient, or operative mechanisms, for carrying out the invention, and referable as detailed mechanisms to the broad elements of the claims, that if said claims are to be construed as limited to the details of such mechanisms as shown in the patent, they become of no protective value or force. It is undoubtedly within the skill of mechanics skilled in the art to construct machines embodying the essence of Liddell's invention and construction, and yet to actuate the moving parts by well-known mechanical devices, widely different in detail

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from those shown in his drawings and described in his specification, but clearly mechanical equivalents thereof.

A patent can certainly be very broad in scope, and broad enough to cover very broad differences of details in mechanism, under the doctrine of equivalency, without requiring that it shall occupy the position held by so few patents, of being of a strictly "primary" or "pioneer" character. It is enough in this particular case, if it be given a fair application of the doctrine of equivalents, as the first machine for making the diamond fold for S. O. S. [self opening, square] bags, involving the combination of a continuously-rotating cylinder with a forming plate, not sharing the rotative motion of the cylinder, but oscillating about its rear edge on said cylinder, in regular and properly related and timed succession, to make the diamond fold on the bag blanks.

MR. JUSTICE MCKENNA, after making the foregoing statement, delivered the opinion of the court.

The defense of want of invention in the Liddell machine is not urged here, because it is said that the decision of that question depends upon mechanical comparisons, too numerous and complicated to be conveniently made by a bench of judges, and because, though the Liddell patent approaches closely the prior art, it "perhaps covers a margin of differentiation sufficient, though barely sufficient, to constitute invention."

The two questions, therefore, which remain for decision are the jurisdiction of the court and the question of infringement. We will consider the latter question first. It does not depend, counsel for the Continental Company says, "upon any issue of fact, but does depend, as questions of infringement" sometimes do, upon a "point of law." This point of law, it is further said, has been formulated in a decision of this court as follows: "Where the patent does not embody a primary invention, but only an improvement on the prior art, and defendant's machines can be differentiated, the charge of infringement is

not sustained." Counsel for respondent do not contend that the Liddell invention is primary within the definition given of that term by petitioner. Their concession is that it is "not basic in the sense of covering the first machine ever produced to make self-opening square bags by machinery." They do contend, however, that it is one of high rank, and if it be given a "fair construction and scope, no matter whether we call it basic, primary or broad, or even merely entitled to be construed as covering obvious mechanical equivalents, the question of infringement of the claims in suit by petitioner's machine becomes mechanically, and from a patent law standpoint, a simple one, in spite of slight differences of operation, and of reversal of some of the moving parts." The lower courts did not designate the invention as either primary or secondary. They did, however, as we shall presently see, decide that it was one of high rank and entitled to a broad range of equivalents. It becomes necessary, therefore, to consider the point of law upon which petitioner contends the question of infringement depends.

The citation is from Cimiotti Unhairing Company v. American Fur Refining Company, 198 U.S. 399, and the Kokomo Fence Machine Case, 189 U.S. 8, was adduced to sustain the proposition. But the whole opinion must be considered, and it will be seen from the language which we shall presently quote that it was not intended to say that the doctrine of equivalents applied only to primary patents.

We do not think it is necessary to follow counsel for petitioner in his review of other cases which, he urges, sustain his contention. The right view is expressed in Miller v. Eagle Manufacturing Company, 151 U. S. 186, 207, as follows: "The range of equivalents depends upon the extent and nature of the invention. If the invention is broad and primary in its character, the range of equivalents will be correspondingly broad, under the liberal construction which the courts give to such inventions." And this was what was decided in Kokomo Fence Machine Case, supra, Cimiotti Unhairing Com-

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pany v. American Fur Refining Company, supra, and Computing Scale Company v. Automatic Scale Company, 204 U. S. 609. It is from the second of those cases, as we have seen, that the citation is made which petitioner contends the point of law upon which infringement depends is formulated; but it was said in that case: "It is well settled that a greater degree of liberality and a wider range of equivalents are permitted where the patent is of a pioneer character than when the invention is simply an improvement, may be the last and successful step, in the art theretofore partially developed by other inventors in the same field."

It is manifest, therefore, that it was not meant to decide that only pioneer patents are entitled to invoke the doctrine of equivalents, but that it was decided that the range of equivalents depends upon and varies with the degree of invention. See Ives et al. v. Hamilton, Executor, 92 U. S. 426; Hoyt v. Horne, 145 U. S. 302; Deering v. Winona Harvester Works, 155 U. S. 286; Walker on Patents, § 362; Robinson on Patents, § 258.

We start, then, with the proposition that the Eastern Company may invoke for the Liddell patent the doctrine of equivalents, but without deciding now how broadly, we proceed to the consideration of the question of infringement. Invention is conceded to the Liddell machine, as we have seen, by the Continental Company. The concession, however, is qualified by the assertion that it covers only a "margin of differentiation" from the prior art. The Circuit Court and the Circuit Court of Appeals had a higher estimate of it. The Circuit Court said that the nature of its invention "was clear was disconnected from what precedes it by such a hiatus, that, if the claims are as extensive as the invention, there is no difficulty so far as concerns the application to the case of the rules with reference to equivalents." And answering the contention that it was the twentieth in the line of patents in its branch of the arts, and that it should be limited to the details described in its specifications, it was said that there was "such a hiatus between them and what appears on the face of the Liddell patent, that they have no effect either in narrowing or broadening the alleged Liddell invention." The Circuit Court of Appeals affirmed the decree of the Circuit Court. It was less circumstantial than the Circuit Court in describing the invention. It said, however, after stating the claims, that their breadth "would imperil the patent, were the real invention less broad; but the defendant (the Continental Company) has not pointed out, and we have been unable to find, any operative combination of a rotary cylinder and forming plate oscillating thereon earlier than the patent in suit. If, therefore, the patent is valid, it has a wide scope, and the mechanical arrangement used by the defendant is fairly within its terms." The lower courts, therefore, found that the invention was a broad one and that the machine used by the Continental Company was an infringement. And these were questions of fact upon which, both of the courts concurring, their findings will not be disturbed, unless clearly wrong. See the case of La Bourgogne, ante, p. 95. To decide the question of invention an examination of the prior art was necessary and a consideration of what step in advance of that art, if any, the Liddell patent was. To decide the question of infringement a comparison of the Liddell machine with the machine used by the Continental Company was necessary and a determination of their similarity or difference. What was involved in these inquiries of fact and the conclusions from them is indicated by a record of many hundred pages of expert testimony and exhibits.

We shall proceed, then, to consider upon what grounds the Circuit Court and Circuit Court of Appeals proceeded and their sufficiency to sustain the judgments rendered within the rule announced.

The bill alleges the infringement of claims 1, 2 and 7. The courts below selected claim 1 for consideration, as determinative of the questions arising, as well on the other two claims as on it. In this counsel for the Continental Company ac-

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quiesced. Claim 1 is as follows: "In a paper bag machine, the combination of a rotating cylinder provided with one or more pairs of side forming fingers adapted to be moved toward or from each other, a forming plate also provided with side forming fingers adapted to be moved toward or from each other, means for operating said fingers at definite times during the formative action upon the bag tube, operating means for the forming plate adapted to cause the said plate to oscillate about its rear edge upon the surface of the cylinder during the rotary movement of said cylinder, the whole operating for the purpose of opening and forming the bottom of the bag tube, and means to move the bag tube with the cylinder." ¹

"The pith of the invention," the Circuit Court said, "is the combination of the rotary cylinder with means of operating the forming plate in connection therewith, limited, however, to means which cause the plate to oscillate about its rear edge." The court expressed the opinion that the invention extended to every means by which that result could be at-

^{12.} In a paper bag machine, the combination of the rotating cylinder provided with one or more pairs of side folding fingers adapted to be moved toward or from each other, a forming plate also provided with side forming fingers adapted to be moved toward or from each other, means for operating said fingers at definite times during the formative action upon the bag tube, operating means for the forming plate adapted to cause the said plate to oscillate about its rear edge upon the surface of the cylinder during the rotary movement of said cylinder for the purpose of opening and forming the bottom of the bag tube, a finger moving with the forming plate for receiving the upper sheet of the tube and lifting it during the formative action, power devices for returning the forming plate to its original position to receive a new bag tube, and means to move the bag tube with the cylinder.

^{7.} In a paper bag machine, the combination of the rotating cylinder for the bag tube provided with one or more pairs of folding fingers adapted to be moved toward or from each other, a forming plate also provided with forming fingers adapted to be moved toward or from each other, means for operating said fingers at definite times during the formative action upon the bag tube, operating means for the forming plate adapted to cause the said plate to oscillate about its rear edge upon the surface of the cylinder during the rotary movement of said cylinder for the purpose of opening and forming the bottom of the bag tube, and connecting mechanism for timing the movements of the rotating cylinder and the forming plate.

tained, and rejected the contention of the Continental Company that the invention was no broader than the details described in the specification. The court said that it was unable to see upon what the proposition could be based. And further said that there was nothing in the prior art which either broadened or narrowed the Liddell invention. "If any of the nineteen patents which had been put in evidence," the court added, "pointed out any form of combining the forming-plate with a rotating cylinder, they would of course narrow what Liddell could claim; but they have nothing of that kind." And speaking of the claims and their limitation by the description, it was said: "Nothing in the manner in which the claims are expressed adopts as the elements the detailed description contained in the specification. So far as the details of the description are concerned, they come within the ordinary rule of preferable method."

We think it is clear that the court considered that Liddell sought to comply with § 4888 of the Revised Statutes.¹ In other words, he filed a description of his invention, explained its principle and the best mode in which he "contemplated applying that principle," and did not intend to give up all other modes of application. An inventor must describe what he conceives to be the best mode, but he is not confined to that. If this were not so most patents would be of little worth. "The principle of the invention is a unit, and invariably the

¹ Sec. 4888. Before any inventor or discoverer shall receive a patent for his invention or discovery, he shall make application therefor, in writing, to the Commissioner of Patents, and shall file in the Patent Office a written description of the same, and of the manner and process of making, constructing, compounding, and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same; and in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle, so as to distinguish it from other inventions; and he shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery. The specification and claim shall be signed by the inventor and attested by two witnesses.

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modes of its embodiment in a concrete invention may be numerous and in appearance very different from each other." Robinson on Patents, § 485. The invention, of course, must be described and the mode of putting it to practical use, but the claims measure the invention. They may be explained and illustrated by the description. They cannot be enlarged by it. Yale Lock Co. v. Greenleaf, 117 U.S. 554. Snow v. Lake Shore &c. Railway Co., 121 U.S. 617, is a case where a claim was limited by a description of the device, with reference to The court, in rejecting the contention that the description of the particular device was to be taken as a mere recommendation of the patentee of the manner in which he contemplated to arrange the parts of his machine, said there was nothing in the context to indicate that the patentee contemplated any alternative for the arrangement of the parts of the device. Therein the description is distinguished from the description in the Liddell patent. Liddell was explicit in the declaration that there might be alternatives for the device described and illustrated by him. He was explicit in saving that in place of the device for controlling the movement of the forming plate relatively to the cylinder that the plate might "be moved or operated by any other suitable means."

This court said in Cimiotti Unhairing Company v. American Fur Refining Company, supra: "In making his claim the inventor is at liberty to choose his own form of expression, and while the courts may construe the same in view of the specifications and the state of the art, they may not add to or detract from the claim." See also Howe Machine Co. v. National Needle Co., 134 U. S. 388, 394.

The discussion thus far brings us to two propositions: that infringement is not averted merely because the machine alleged to infringe may be differentiated from the patented machine, even though the invention embodied in the latter be not primary; and, second, that the description does not necessarily limit the claims. It is probably not contended

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abstractly by the Continental Company that the description necessarily limits the claims, but only in the case at bar as following from the first proposition, that is, as resulting from the alleged narrow character of the Liddell invention. A few words more may be necessary to develop fully the contention. Counsel separates the claims of the Liddell machine into divisions, and says that the fourth division of the claimed mechanism in each of the three claims alleged to be infringed is in exactly the same words, which words are: "Operating means for the forming plate, adapted to cause the said plate to oscillate about its rear edge upon the surface of the cylinder during the rotary movement of said cylinder." And it is argued that neither claim designates "operating means," either by names or by reference letters or numerals, and recourse must therefore be had to the descriptive part of the specification to ascertain what "operating means" are meant, and then construe the claim as calling for those "operating means" or their equivalents. The other way, it is said, is to ignore the descriptive part of the specification "and to construe the claim as being satisfied by any 'operating means' which can perform the particular function designated in the claim." Under the second method, it is insisted, identity of function constitutes infringement. Under the first method identity of function must be accompanied by substantial identity of character and substantial identity of mode of operation in order to constitute that result. The second method was adopted, it is urged, by the Circuit Court, and led it into the error of deciding that "Liddell's alleged invention covers every method of combining the rotary cylinder with the forming plate to oscillate about its rear edge on the surface of the cylinder, and the claims are as broad as the invention."

It may be well before considering these contentions to refer again to the view which the Circuit Court and the Circuit Court of Appeals had of Liddell's patent. The Circuit Court said that the "pith" of the invention "is the combination of the rotary cylinder with means for operating the forming plate

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in connection therewith, limited, however, to means which cause the plate to oscillate about its rear edge on the surface thereof," and distinguished the invention from the prior art. as follows: "Aside from the cylinder and the forming plate oscillating about its rear edge everything in these claims [the claims of the patent] is necessarily old in the arts." It was this peculiar feature of novelty, it was said, which clearly distinguished it from all that went before it. This conclusion was in effect affirmed by the Circuit Court of Appeals. The latter court said that the folding of the bottoms of S. O. S. paper bags had been accomplished in the prior art "both by a folding plate reciprocating upon a plane, and by the operation of fingers upon a cylinder. The folding plate and the cylinder had never been combined. The complainant urges with much probability that the reason why they had not been combined lay in the difficulty of operating a pivoted folding form upon the surface of a cylinder. Two circles external to each can be in contact at but one point, while, in order that the folding plate may operate, its end, as it moves upon a pivot, must remain for some distance in contact with the surface of the revolving cylinder. The problem-may be solved by causing the pivot or axis of the folding plate to yield away from the cylinder, or by causing the surface of the cylinder to be depressed away from the folding plate. The patent in suit adopts the first device, the defendant's machine the second, and the crucial question before the court is this: Under all the circumstances of the case, is the second method, as compared with the first, within the doctrine of equivalents?"

The court, as we have seen, concluded, from the character of the Liddell patent, that "the second method," that is, the method of the Continental Company's machine, was "within the doctrine of equivalents."

Counsel, however, contends that the Circuit Court, in its decision, virtually gave Liddell a patent for a function by holding that he was entitled to every means to cause the forming plate to oscillate about its rear edge.

The distinction between a practically operative mechanism and its function is said to be difficult to define. Robinson on Patents, § 144, et seq. It becomes more difficult when a definition is attempted of a function of an element of a combination which are the means by which other elements are connected and by which they coact and make complete and efficient the invention. But abstractions need not engage us. The claim is not for a function, but for mechanical means to bring into working relation the folding plate and the cylinder. This relation is the very essence of the invention, and marks the advance upon the prior art. It is the thing that never had been done before, and both the lower courts found that the machines of the Continental Company were infringements of it. It is not possible to say that the findings of those courts on that fact or on the fact of invention were clearly wrong. notwithstanding the great ability of the argument submitted against them.

2. The next contention of the petitioner is that a court of equity has no jurisdiction to restrain the "infringement of letters patent the invention covered by which has long and always and unreasonably been held in non-use . . . instead of being made beneficial to the art to which it belongs." It will be observed that it is not urged that non-use merely of the patent takes jurisdiction from equity, but an unreasonable non-use. And counsel concedes indulgence to a non-use which is "non-chargeable to the owner of the patent," as lack of means, or lack of ability or opportunity to induce others to put the patent to use. In other words, a question is presented, not of the construction of the law simply but of the conduct of the patentee as contravening the supposed public policy of the law.

The foundation of the argument of the petitioner is, as we have intimated, the policy of the patent laws executing the purpose of the Constitution of the United States to promote the progress of science and useful arts by securing for limited times to inventors the exclusive right to their respective dis-

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coveries. Art. I, § 8. And it is urged that the non-use of an invention for seventeen years (of course, the whole term of the patent may be selected to test the argument) is not to promote the progress of the useful arts, and the contention is that equity should not give its aid to defeat the policy of the statute, but remit the derelict patentee to his legal remedy. The penalty does not seem to fit the case. It is conceded that the patent is not defeated; only that a particular remedy is taken away. It is conceded that the remedy at law remains. It is conceded. therefore, that a right has been conferred, but it is said that it may be infringed, though the policy of the law is violated. The petitioner, further to sustain its side of the question, refers to the provision in § 4921, giving power to the courts to grant injunctions. The provision is: "The several courts vested with jurisdiction of cases arising under the patent law shall have power to grant injunctions according to the course and principles of equity, to prevent the violation of any right secured by the patent, . . ." and the petitioner cites Root v. Railway Company, 105 U.S. 183, 216, for the contention that the statute does not confer power to grant the injunction, except as incidental to some other equity.

It may be well, however, before considering what remedies a patentee is entitled to, to consider what rights are conferred upon him. The source of the rights is, of course, the law, and we are admonished at the outset that we must look for the policy of a statute, not in matters outside of it—not to circumstances of expediency and to supposed purposes not expressed by the words. The patent law is the execution of a policy having its first expression in the Constitution, and it may be supposed that all that was deemed necessary to accomplish and safeguard it must have been studied and provided for. It is worthy of note that all that has been deemed necessary for that purpose, through the experience of years, has been to provide for an exclusive right to inventors to make, use and vend their inventions. In other words, the language of complete monopoly has been employed, and though at first

only a remedy at law was given for a violation of the right. a remedy in equity was given as early as 1819. There has been no qualification, however, of the right, except as hereinafter stated. An exception which, we may now say, shows the extent of the right—a right so explicitly given and so complete that it would seem to need no further explanation than the word of the statute. It has, however, received explanation in a number of cases which bring out clearly the services rendered by an inventor to the arts and sciences and to the public. Those cases declare that he receives nothing from the law that he did not have before, and that the only effect of the patent is to restrain others from manufacturing and using that which he has invented. United States v. Bell Telephone Company, 167 U.S. 224, 249. And it was further said in that case that the inventor could have kept his discovery to himself, but to induce a disclosure of it Congress has, by its legislation, made in pursuance of the Constitution, guaranteed to him an exclusive right to it for a limited time, and the purpose of the patent is to protect him in this monopoly—not to give him a use which he did not have before, "but only to separate to him an exclusive use." And it was pointed out that the monopoly which he receives is only for a few years. court further said: "Counsel seem to argue that one who has made an invention and thereupon applies for a patent therefor occupies, as it were, the position of a quasi-trustee for the public; that he is under a sort of moral obligation to see that the public acquires the right to the free use of that invention as soon as is conveniently possible. We dissent entirely from the thought thus urged. The inventor is one who has discovered something of value. It is his absolute property. He may withhold a knowledge of it from the public, and he may insist upon all the advantages and benefits which the statute promises to him who discloses to the public his invention."

And the same relative rights of the patentee and the public were expressed in prior cases, and we cite them because there is something more than the repetition of the same thought

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by doing so. It shows that whenever this court has had occasion to speak it has decided that an inventor receives from a patent the right to exclude others from its use for the time prescribed in the statute. "And for his exclusive enjoyment of it during that time the public faith is forever pledged." (Chief Justice Marshall in *Grant* v. *Raymond*, 6 Pet. 243, p. 242.)

And, in *Bloomer* v. *McQuewan*, 14 How. 539, 549, Chief Justice Taney said: "The franchise which the patent grants consists altogether in the right to exclude every one from making, using, or vending the thing patented, without the permission of the patentee. This is all that he obtains by the patent."

In Patterson v. Kentucky, 97 U. S. 501, it was said that an inventor's own right to the use was not enlarged or affected by a patent. See also Wilson v. Rousseau, 4 How. 646, 674; Seymour v. Osborne, 11 Wall. 516, 533; Cammeyer v. Newton, 94 U. S. 225; Densmore v. Scofield, 102 U. S. 375.

It may be said that these cases deal only with the right of a patentee, and not with the remedy, whether at law or equity, that he may, at any time, or in all his situations, be entitled to. And there is no case in this court that explicitly does so. However, in the three last cases cited it was decided that patents are property, and entitled to the same rights and sanctions as other property.

In Bement v. National Harrow Company, 186 U. S. 70, 90, adopting the language of the Circuit Court of Appeals for the Sixth Circuit in Heaton Peninsular Company v. Eureka Specialty Company, 77 Fed. Rep. 294, it was said: "If he [a patentee] sees fit, he may reserve to himself the exclusive use of the invention or discovery. If he will neither use his device nor permit others to use it, he has but suppressed his own, . . . his title is exclusive, and so clearly within the constitutional provisions in respect to private property that he is neither bound to use his discovery himself or permit others to use it. The dictum found in Hoe v. Knapp, 17 Fed. Rep. 204, is not supported by reason or authority."

In Hoe v. Knapp, Judge Blodgett refused an injunction

against the infringer, holding that "under a patent which gives a patentee a monopoly, he is bound to either use the patent himself or allow others to use it on reasonable terms." In a number of the Circuit Courts of Appeals it has been decided that as a consequence of the exclusive right of the patentee he is entitled to an injunction against an infringer, even though he (the patentee) does not use the patented device. The cases are inserted in the margin, also decisions of the Circuit Courts, some of which define the right of a patentee and others holding that as incident to the right he is entitled to an injunction, though he had not used his invention.

Counsel for petitioner cites counter cases, which he contends are more direct authority.³ He also reviews the cases cited

¹ Edison v. Mt. Morris Co., 57 Fed. Rep. 642, 644 (2d Cir.); Heaton-Peninsular Co. v. Eureka Co., 77 Fed. Rep. 294 (6th Cir.); Crown Cork & Seal Co. v. Aluminum Stopper Co., 108 Fed. Rep. 845, 868 (4th Cir.); Fuller v. Berger, 120 Fed. Rep. 274, 277 (7th Cir.); Lamson Consolidated Service Co. v. Hillman, 123 Fed. Rep. 416, 422 (7th Cir.); Victor Talking Machine Co. v. Fair, 123 Fed. Rep. 425 (7th Cir.); U. S. Seeded Raisin Co. v. Griffin, 126 Fed. Rep. 364, 368 (9th Cir.); Rupp v. Elliott, 131 Fed. Rep. 730 (6th Cir.); Munroe v. Railway Appliance Co., 145 Fed. Rep. 646, 648 (7th Cir.); Filter Co. v. Jakson, 140 Fed. Rep. 340, 343 (8th Cir.); U. S. Fastener Co. v. Bradley, 149 Fed. Rep. 222 (2d Cir.); Rubber Tire Co. v. Milwaukee, 154 Fed. Rep. 358, 361 (7th Cir.); Indiana Mfg. Co. v. J. I. Case Co., 154 Fed. Rep. 365 (7th Cir.).

² Carr v. Rice, 1 Fish. 198, 200 (N. Y.); Wintermute v. Redington, 1 Fish. 243 (Ohio); Ransom v. Mayor, 1 Fish. 255 (N. Y.); Pitts v. Wemple, 2 Fish. 15 (Ill.); Whitney v. Emmett, 1 Bald. 304; Broadnax v. Central Stock Yard, 4 Fed. Rep. 214, 216 (N. J.); In re Brosnahan, Jr., 18 Fed. Rep. 62 (Justice Miller) (Mo.); Consolidated Roller Mill Co. v. Coombs, 39 Fed. Rep. 803 (Mich.); Wirt v. Hicks, 46 Fed. Rep. 71 (N. Y.); Campbell v. Manhattan Railway, 49 Fed. Rep. 930 (N. Y.); Edison v. Mt. Morris, 57 Fed. Rep. 642, 644 (N. Y.); Masseth v. Johnston, 59 Fed. Rep. 612 (Pa.); Bonsack v. Smith, 70 Fed. Rep. 383 (N. C.); Columbia v. Freeman, 71 Fed. Rep. 302, 306 (Mo.); Wyckoff v. Wagner, 88 Fed. Rep. 515 (N. Y.); White v. Peerless, 111 Fed. Rep. 190 (Pa.); Brodrick v. Mayhew, 131 Fed. Rep. 92 (Wis.); National Co. v. Daab, 136 Fed. Rep. 891, 895 (N. J.); Hoe v. Miehle, 141 Fed. Rep. 115 (N. Y.); Hartman v. Park & Son, 145 Fed. Rep. 358 (Ky.).

³ Isaacs v. Holland, 4 Wash. C. C. 54; Ogle v. Ege, 4 Wash. C. C. 584; Mott v. Bennett, 2 Fisher, 642; Sullivan v. Redfield, 1 Paine, 441; Magic Ruffle Co. v. Daughlas, 2 Fisher, 333; Hoe v. Knapp, 27 Fed. Rep. 204; Germain v. Wilgus, 67 Fed. Rep. 600, C. C. A. Ninth Circuit; Campbell Printing Press Co. v. Duplex Printing Press Co., 86 Fed. Rep. 331; Robinson on

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by respondent, and contends that they are not relevant to the question in the case at bar, which is not that of the simple non-use of a patent, but a long and unreasonable non-use of it. Judge Aldrich, in his dissenting opinion in the Court of Appeals, excluded the cases as authoritative for a different reason than counsel expresses. The learned judge said:

"Simple non-use is one thing. Standing alone, non-use is no efficient reason for withholding injunction. There are many reasons for non-use which, upon explanation, are cogent, but when acquiring, holding and non-use are only explainable upon the hypothesis of a purpose to abnormally force trade into unnatural channels—a hypothesis involving an attitude which offends public policy, the conscience of equity, and the very spirit and intention of the law upon which the legal right is founded—it is quite another thing. This is an aspect which has not been considered in a case like the one here."

Respondent attacks the conclusion of Judge Aldrich and that of petitioner, and insists that there is nothing in the record to show that the non-use of the patent was either unreasonable or sinister. A very strong argument is presented by respondent. Its counsel pointedly say that "there is no record evidence at all on the subject or character of complainants' [respondents'] use or non-use," and points out that neither the assignments of error on appeal to the Circuit Court of Appeals nor the petition for rehearing in that court presented the question that the injunction should be denied on the ground of mere non-use or unreasonable non-use. Let us see what the courts say and what petitioner says. The Circuit Court says:

"We have stated that no machine for practical manufacturing purposes was ever constructed under the Liddell patent. The record also shows that the complainant, so to speak, locked up its patent. It has never attempted to make any

Patents, vol. 1, § 43; Curtis on Patents, § 320 of the two first editions and § 406 of the third and fourth editions.

practical use of it, either itself or through licenses, and, apparently, its proposed policy has been to avoid this. In this respect it has not the common excuse of a lack of means, as it is unquestioned that the complainant is a powerful and wealthy corporation. We have no doubt that the complainant stands in the common class of manufacturers who accumulate patents merely for the purpose of protecting their general industries and shutting out competitors."

The comment of the Circuit Court of Appeals is:

"The machine of the patent in suit is mechanically operative, as was shown experimentally for the purposes of this suit, but it has not been put into commercial use. No reason for the non-user appears in the evidence, so far as we can discover. The defendant's machine has been an assured commercial success for some years. It was suggested at the oral argument that an unused patent is not entitled to the protection given by the extraordinary remedy of an injunction. This contention was not made in the defendant's printed brief. While this question has not been directly passed upon, so far as we are informed, in any considered decision of the Supreme Court, yet the weight of authority is in favor of the complainant." The cases were cited.

If these statements are to be reconciled it can only be by supposing that the Circuit Court inferred the motive of the respondents from the unexplained non-use of the patent. But petitioner has given its explanation of the purpose of respondent. Quoting Judge Aldrich, that the patent in suit has been "deliberately held in non-use for a wrongful purpose," petitioner asks, "What was that wrongful purpose? It was the purpose to make more money with the existing old reciprocating Lorenz & Honiss machines and the existing old complicated Stilwell machines than could be made with new Liddell machines, when the cost of building the latter was taken into account. And this purpose was effective to cause the long and invariable non-use of the Liddell invention, notwithstanding that new Liddell machines might have produced

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better paper bags than the old Lorenz & Honiss machines or the old Stilwell machines were producing."

But, granting all this, it is certainly disputable that the non-use was unreasonable or that the rights of the public were involved. There was no question of a diminished supply or of increase of prices, and can it be said, as a matter of law, that a non-use was unreasonable which had for its motive the saving of the expense that would have been involved by changing the equipment of a factory from one set of machines to another? And even if the old machines could have been altered, the expense would have been considerable. As to the suggestion that competitors were excluded from the use of the new patent, we answer that such exclusion may be said to have been of the very essence of the right conferred by the patent, as it is the privilege of any owner of property to use or not use it, without question of motive. Connolly v. Union Sewer Pipe Co., 184 U. S. 546.

The right which a patentee receives does not need much further explanation. We have seen that it has been the judgment of Congress from the beginning that the sciences and the useful arts could be best advanced by giving an exclusive right to an inventor. The only qualification ever made was against aliens in the act of 1832. That act extended the privilege of the patent law to aliens, but required them "to introduce into public use in the United States the invention or improvement within one year from the issuing thereof," and indulged no intermission of the public use for any period longer than six months. A violation of the law rendered the patent void. The act was repealed in 1836. It is manifest, as is said in Walker on Patents, § 106, that Congress has not "overlooked the subject of non-user of patented inventions." And another fact may be mentioned. In some foreign countries the right granted to an inventor is affected by non-use. This policy, we must assume, Congress has not been ignorant of nor of its effects. It has, nevertheless, selected another policy; it has continued that policy through many years. We may assume that ex-

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perience has demonstrated its wisdom and beneficial effect upon the arts and sciences.

From the character of the right of the patentee we may judge of his remedies. It hardly needs to be pointed out that the right can only retain its attribute of exclusiveness by a prevention of its violation. Anything but prevention takes away the privilege which the law confers upon the patentee. If the conception of the law that a judgment in an action at law is reparation for the trespass, it is only for the particular trespass that is the ground of the action. There may be other trespasses and continuing wrongs and the vexation of many actions. These are well-recognized grounds of equity jurisdiction, especially in patent cases, and a citation of cases is unnecessary. Whether, however, a case cannot arise where, regarding the situation of the parties in view of the public interest, a court of equity might be justified in withholding relief by injunction we do not decide.

Decree affirmed.

MR. JUSTICE HARLAN thinks that the original bill should have been dismissed. He thinks the facts are such that the court should have declined, upon grounds of public policy, to give any relief to the plaintiff by injunction, and he dissents from the opinion and judgment.